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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,560

05/13/2005

Dean Maxwell Voice

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EXAMINER

BUTLER, PATRICK NEAL

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

07/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,560	Applicant(s) VOICE, DEAN MAXWELL	
	Examiner Patrick Butler	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050517</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, Claims 1-5, in the reply filed on 06 December 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim 6 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakkelunn (International Publication Number WO 85/01238) in view of Bernstein (US Patent No. 3,298,974).

With respect to Claim 1, Bakkelunn teaches a method of making a product of foamed plastic material with glass fiber reinforcement (a method of manufacturing a glass fibre reinforced structural composite article) (see title and page 3, lines 15-16) by spraying polyester blended with propellant by an agitator 2 or a mixing organ 16 (said method comprising the steps of spraying a mechanically blended polyester foam into a mould) (see page 5, lines 21-25 and page 8, lines 1-6) while directing chopped fibre

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glass to the mould F (whilst simultaneously introducing chopped glass fibre) (see page 6, lines 1-10). Bakkelunn teaches using a propellant gas (said mechanically blended polyester is foamed utilizing a gas) (see page 5, lines 21-25).

Bakkelunn teaches to produce a reinforced product (see page 3, lines 14-20), but the viscosity of 140-300 mPa·s (140-300 cP) does not expressly teach using high viscosity polyester resin by teaching (see page 3, lines 27-29).

Bernstein teaches using higher viscosity polyester foam to provide inexpensive and excellent rigid foam (see col. 2, lines 14-34 and col. 3, lines 55-62).

Bernstein does not appear to explicitly teach that polyester foam viscosity is within the claimed range (e.g., 12,000-15000 cP).

However, in this regard, Bernstein teaches using higher viscosity polyester foam (12,000-15000 cP) (see col. 3, lines 55-62). As such, Bernstein recognizes that polyester foam viscosity is a result-effective variable. Since polyester foam viscosity is a result-effective variable, one of ordinary skill in the art would have obviously been motivated to determine the optimum polyester foam viscosity applied in the process of Bakkelunn in view of Bernstein through routine experimentation based upon providing inexpensive and excellent rigid foam (see col. 2, lines 14-34).

With respect to Claim 2, Bakkelunn teaches attaching a fibre glass cutter mounted on the spray pistol to add glass fiber to the sprayed polyester (see page 6, lines 3-5).

Bakkelunn discloses the claimed invention except for adding glass fiber to the polyester prior to the polyester resin being foamed and sprayed. It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to add glass fiber to the polyester prior to the polyester resin being foamed and sprayed, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167 (See MPEP § 2144.04(IV)(C)).

With respect to Claim 3, Bakkellunn teaches that the chopped fiber is 20-30 per cent by weight (wherein the milled glass fibre is added at 0-30% by weight) (see page 7, lines 18-29).

With respect to Claim 4, Bern Bakkellunn stein does not appear to explicitly teach that the cut glass fiber length is within the claimed range (e.g., up to 2 mm).

However, in this regard, Bakkellunn teaches cutting the fibre glass with a cutter (see page 6, page 1-10), controlling the application organs for desired effects (see page 6, lines 17-21), and reinforcing with the fiber (see page 3, lines 14-20). The length of the fiber would necessarily be inversely controlled by the cutting rate. As such, Bernstein recognizes that cut glass fiber length is a result-effective variable. Since cut glass fiber length is a result-effective variable, one of ordinary skill in the art would have obviously been motivated to determine the optimum cut glass fiber length applied in the process of Bakkellunn through routine experimentation based upon providing desired strength (see page 3, lines 14-20).

With respect to Claim 5, Bakkellunn teaches that carbon dioxide is used as the gas (see page 7, lines 31-34).

With respect to Claim 11, Bakkellunn teaches a density of 800 kg/m³ (0.8 g/cm³) (see page 7, lines 18-28).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. B./
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791